



# PSYCHOTRONIC TECHNOLOGIES

## Building a BINAURAL SIGNAL GENERATOR! by Peter Nielsen - Parascience Technologies

There has been a proliferation of Mind Machines recently... These amazing devices typically emit pulsating light n' sound to condition the brain into an altered state of awareness. By simply turning a knob, neurological patterns associated with various subjective abilities can be triggered and prolonged indefinitely. Random influences are excluded. *Either you like the idea, or you don't!*

## HEARING AIDS .....

Frankly, I've grown complacent about flashing goggles... seductive as they are. Also, in my opinion, they have two minor drawbacks; firstly, a kind of harshness that doesn't fully address the brain's own synergetic faculty. Secondly... usually, a lack of provision for setting precise frequencies. You never know exactly where you are, and some psycho-active "windows" are definable to within 1/100th of a cycle per second. Still, they are a valid starting point.

This project is more organic in feeling. Its effect relies on our natural ability to synthesize a third sound, or "beat frequency", from two external ones. When differing sounds are admitted to each ear, the brain hemispheres conjoin to improvise an internal sensation of noise from the summed waveform interactions. The complimentary left and right brain functions of assertion and receptivity, harmonize in a burst of mutually augmentative perception. This event, also attainable through learned biological resonance, is the doorway to supra-sensory cognition. The resulting holographic sound image imposes directionality, texture and space upon our sense of hearing. In other words, a more real "reality".

When deprived of this form of sensory orientation, such as in a float tank or prolonged spiritual retreat, the isolated mind will cleverly REVERSE this process to project its own "hallucinatory" world from latent impressions. The more common manifestation is dreams during sleep. If consciously invoked, this ordinarily repressed faculty is the key to ESP, past life recall, clairaudience... and the all-pervading cosmic intelligence... the calculated somersault through Alice's

looking glass. Outer AND inner realms are thereby accessible as objective, yet non-self-existent, modes of inter-dependency.

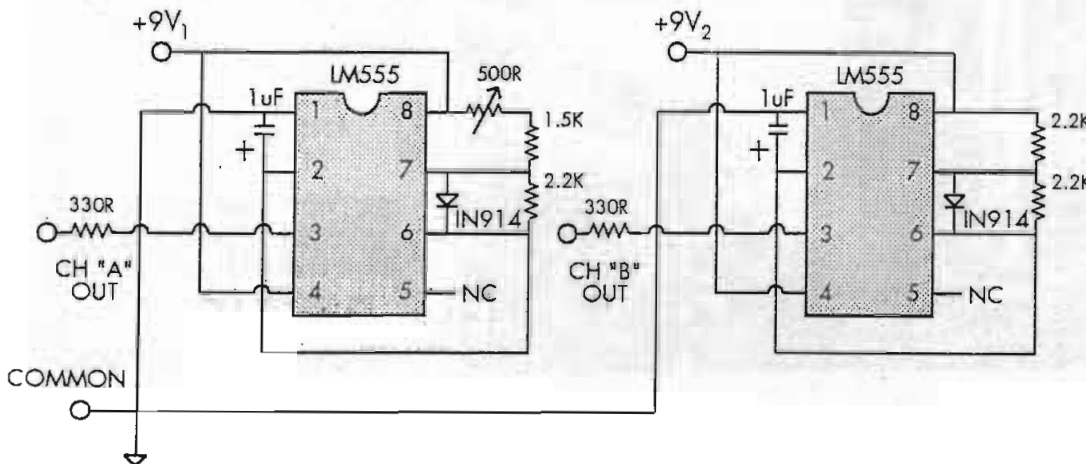
Try this experiment... with your eyes closed, try to focus on where the sounds converging from either side of you merge within. It's a very nice space that meditators will recognise.

I find the sensation like a subtle curtain of undulating pressure within the head... an ideal mechanism for brain-wave capture, once widely used in religious chanting and architectural acoustics. It's a standing wave of information-carrying energy that can, in terms of its inferred attributes, subliminally affect your health and emotional involvement. This is how a stereo system recreates the 'presence' of the band. Inversely, it is also the anatomical reference point in the composer from which the music first arose as symbols.

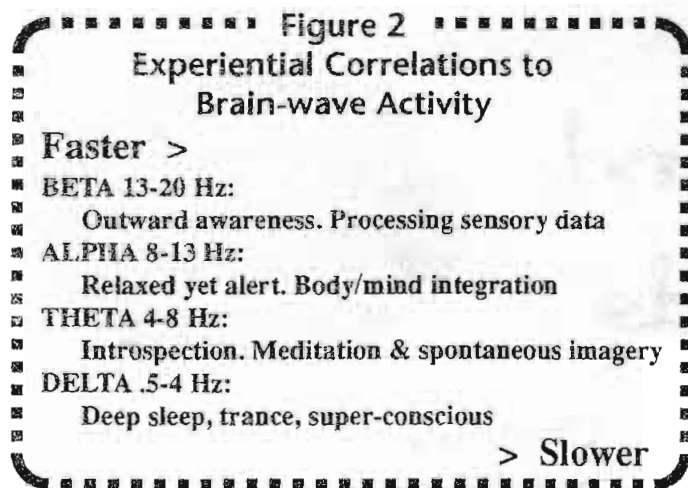
## BI-CYCLES .....

Back in the lab, we can demonstrate one aspect of this unifying principle with two simple audio oscillators, each feeding into one side of a pair of headphones. By ensuring that the two originating signals can be made to differ by a selectable rate between 3-25 cycles per second (Hz), the mind can be correspondingly stimulated to synthesize its own beta, alpha, theta or delta rhythms..the bi-directional carrier waves of both our level of creativity and perception. See Figure. 2 on the next page for some experiential derivatives of this induced ELF (extreme low frequency) component.

This device is called a "Binaural Frequency Generator", and has been popularized by Dr Monroe in his famous lucid



**Figure 1  
Binaural  
Frequency  
Generator**



dreaming experiments. His technique, termed "*hemi-sync*", is based on a sequential introduction of psycho-active beat frequencies to keep self-cognisant areas of the brain active during transition to sleep. Through enhanced awareness, the subject sustains waking volition over his mental content, while simultaneously immersed in it as a tangible reality.... *a technological dream yoga*. A professional version sells for \$500, you can make the preliminary circuit shown here work for **under \$15**. Once designed, it took only 15 minutes to construct.

**A note for the beginner:** Not knowing a little about electronics today, is like a caveman not knowing about fire. Can't solder? Ride your dinosaur over to an electronic hobby store and get a solderless project board, set of clip leads, and the remaining bits specific to this particular gadget. Take the diagram (Figure 1.) and ask questions if necessary.

**Technical interlude:** This pre-tested circuit is intended to demonstrate the above effect using the easiest approach. The LM555's must be run from two batteries, and at 50% duty cycle exactly as shown. For optimal tuning range, the 1.5k resistor may need to be trimmed with a series resistance. To produce a clearer beat, detune the inherently more stale sine outputs of two XR2206 IC's. These may even be adjusted ABOVE or BELOW the threshold of human hearing, so that the originating tones remain unheard... spooky implications.

When you remove the headphones after a few minutes at most settings, something remarkable will occur in reference to the sounds around you... but I won't give that away...

*Science has its own rewards. Remember, this IS research. Proceed with moderation, and at your own risk.* 